

**Cost FAC**  
**Meeting at Fort Worth District Corps of Engineers**  
**18 - 19 July 2001**

1. **Participants.** The following committee members and guests participated in the meeting and software demonstrations at Fort Worth District Offices.

Jack Shelton	SWD
Daniel Long	CEHNC-ED-ES-C
Raymond Lynn	HQUSACE
David Brown	CESAS-EN-C
Julie Davin	CENWW-ED-SC
Milton Schmidt	CESWF-EC-AC
Arthur Belanger	CESPK-ED-C
Gareth Clausen	CENWW-ED-C
David Hopkins	CESWF-EC-AC
Lee Osborne	CESWF-EC-AC

2. **Presentations.**

Mr. Bret Lawson and Mr. Greg Duyka, On Center Software, Inc. presented a demonstration of the "On-Screen Takeoff" software.

Mr. Erich Schoenkopf, Vertigraph, inc. presented a demonstration of "BidScreen XL" software.

Mr. Doug Moat, Bentley Systems, Inc. discussed with the team how cost estimating could integrate with various Bentley System software, specifically "ProjectWise". "ProjectWise" is an engineering information management system that can easily configure automated triggers that can provide managers a tool to provide design data to the Cost Estimator in a timely manner. Doug will provide a point of contact for specific questions regarding MicroStation TriForma.

Mr. Jeff Quesnell and Mr. Don Quinn, Eagle Point Software, presented an on-line Web-based meeting demonstration of their company's "Bid-Builder" takeoff capability. Training and support capabilities utilizing Internet access was also demonstrated.

3. **Discussions.**

Discussions included the following (in no particular order):

- Utilize the current MCACES POC's for distribution and information gathering from each Corps District.
- Future committee efforts must be product orientated. Funding sources are not available for studies or reviews. Studies or reviews are no longer supported.

- Encourage all Cost Engineers to utilize CADD drawings or electronic bid set drawings wherever possible.
- Software evaluation criteria were developed and each weighed according to each other criteria. The Value Engineering process is proposed to conduct and present the evaluation of each software. Brainstorming notes and initial weighing is attached to these minutes.
- It was emphasized that the efforts and work of this committee continue.
- Develop and present a project for possible funding in FY02.
- There was general consensus that Cost Engineers should pull data from CADD drawings. The opposite is for the designer to push data to the Cost Engineer. This would be additional effort on the part of the designer which designers may be reluctant to do. It was acknowledged that whoever performs quantity take-off varies from District to District.

#### **4. Scheduled Conference Calls.**

The next committee conference call meetings are scheduled for Thursdays, 26 July, and 9 August, 11:00am Pacific Standard Time. Call-in number, pass code, and agenda will be distributed.

Meeting adjourned.

## CRITERIA

### Easel Sheet 1

<b>H</b>	Read all Vector Files .dgn, .dwg, .dxf
<b>I</b>	Read all Raster Files, Corps EBS, .cal, .tiff
<b>C</b>	Initial Cost – Site License \$, Training \$, Update \$
<b>F</b>	Ease of use / User Friendly
<b>G</b>	Training
b	<del>Compatibility w/ Excel – Lotus</del> <del>Future enhancements for Corps</del> <del>Existing Capabilities</del>
<b>J</b>	Open / Not Proprietary
b	Number of Intermediate Steps to Estimate

### Easel Sheet 2

<b>ABS</b>	English and Metric
j	Free Viewer / Scaled Down Version – Not Proprietary
<b>D</b>	WBS Fixed / open / flexible
<b>B</b>	Export to Database / Access
<b>E</b>	Takeoff Layers / viewing levels
j	Immediate Modifications for Corps Databases
a	<del>Save T/O Overlay for Backup</del>
f	Capture MEP – Vertical drops
I h	Allow for Scaling
a	<del>Redline Capability</del>
a	Symbology / color - line – shape
a	Capture links Takeoff -> Data "cell"

### Easel Sheet 3

d	Template Capabilities / Creation & Use
<b>ABS</b>	Operating System Versions (Required)
f	Multiple Views Plan / Detail / Data
<b>A</b>	Audit Trail of T.O. items "Red-line" (from designers) (Layer on/off) (Cross-sections)

CRITERIA:

- A - Audit Trail - Ability to check, Redline, Layer on/off, backup, cross section, capture link, symbology
- B - Export to Database, Excel, Lotus - and intermediate steps
- C - Cost (Initial Cost) Site license versus Individual
- D - WBS, fixed, open, template capability
- E - Layers - viewing levels takeoff
- F - Ease of use - multiple views - user friendly - capture vertical drops
- G - Training - difficulty of the software to learn
- H - Read Vector format - allow for scaling
- I - Read Tiff format - allow for scaling
- J - Open not proprietary - free viewer, open to 3rd party, immediate modification
- K -

A	B	C	D	E	F	G	H	I	J	K	SCORE	ORDER
A	0	4	2	1	2	3	1	0	2		15	
B			2	1	3	3	1	0	2		16	
C				3	3	0	3	4	4		0	
D					1	1	2	2	3	1	7	
E						1	1	2	3	2	8	
F							0	2	3	2	6	
G								2	3	2	0	
H									1	3	15	
I										4	20	HIGH
J											6	
K											0	

PREFERENCE WEIGHING

- 0 - No Difference
- 1 - Minor Difference
- 2 -
- 3 - Medium Difference
- 4 -
- 5 - Major Difference